

AMERICAN BEE JOURNAL



GEORGE W. YORK,
Editor

CHICAGO, ILL., JULY 11, 1901.

FORTY-FIRST YEAR
No. 27.

WEEKLY



W. W. WHIPPLE, HIS APIARY AND KINGBIRD DESTROYER.—(See page 434.)

THE AMERICAN BEE JOURNAL.

PUBLISHED WEEKLY BY

GEORGE W. YORK & COMPANY
144 & 146 Erie St., Chicago, Ill.

Entered at the Post-Office at Chicago as Second-Class Mail-Matter.

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PROF. A. J. COOK, }

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The Wrapper-Label Date of this paper indicates the end of the month to which your subscription is paid. For instance, "dec01" on your label shows that it is paid to the end of December, 1901.

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National Bee-Keepers' Association

OBJECTS:

To promote and protect the interests of its members.

To prevent the adulteration of honey.

To prosecute dishonest honey-dealers.

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A Celluloid Queen-Button is a very pretty thing for a bee-keeper or honey-seller to wear on his coat-lapel. It often serves to introduce the subject of honey, and frequently leads to a sale.

NOTE.—One reader writes: "I have every reason to believe that it would be a very good idea for every bee-keeper to wear one [of the buttons] as it will cause people to ask questions about the busy bee, and many a conversation thus started would wind up with the sale of more or less honey; at any rate it would give the bee-keeper a superior opportunity to enlighten many a person in regard to honey and bees."

The picture shown herewith is a reproduction of a motto queen-button that we are furnishing to bee-keepers. It has a pin on the underside to fasten it.

Price, by mail, 6 cents; two for 10 cents; or 6 for 25 cents. Send all orders to the office of the American Bee Journal.



Weekly Budget.

HOT WEATHER HINT.

"Hot weather? yes: but really not Compared with weather twice as hot. Find comfort, then, in arguing thus, And you'll pull through victorious: For instance, while you gasp and pant And try to cool yourself—and can't— With soda, cream, and lemonade, The heat at ninety in the shade— Just calmly sit and ponder o'er These same degrees, with ninety more On top of them, and so concede The weather now is cool indeed!"

—J. WHITCOMB RILEY.

MR. C. A. HATCH, writing us June 22, had this to say:

"We had poor luck in wintering bees the past winter, so we have not an extra-large force of honey-gatherers. I think fully 50 percent of the bees in this part of Wisconsin are dead. My own loss was about 30 percent—the heaviest for many years. We hope for better luck next time."

DR. A. B. MASON, secretary of the National Bee-Keepers' Association has been appointed judge of the bee and honey department of the Ohio Exposition, which will be held at Columbus next month. A total of only \$74 is to be awarded in that department, so the Doctor ought not to have a very long or hard job.

The Doctor wrote us, July 1, as follows about his bees:

"No honey from the world of white clover we have, but sweet clover is getting nicely in bloom, and the bees are busy on it. We have colonies with two, three, and three and a half stories, to give room to the bees, and running over at that, and no disposition to swarm."

MR. W. W. WHIPPLE and his apiary, of Arapahoe Co., Colo., are shown on our first page this week. Mr. W. is a native of Michigan, and in his boyhood days learned the printing business. He drifted into western Iowa in the early fifties, and went to Colorado in 1859, during the Pike's Peak gold excitement. He has worked as printer, job printer, miner, and lastly as a bee-keeper, and will probably follow the latter occupation the remainder of his days.

Mr. Whipple has met with varied success in bee-keeping, but is fairly well satisfied, although he says the bee-keeper has no picnic in Colorado. He must be constantly on his guard to keep clear of that pest—foul brood. When he first went to his present locality there were many farmers who had a few colonies of bees, and when a colony died they would not know the cause, or even that it was dead (and in most cases it was foul brood that killed it), until the colony was robbed of its stores, and they were spread far and near, making trouble for the bee-keepers. Bee-keeping there would be a pleasant and profitable business were it not for this, so Mr. Whipple says.

They are expecting a good alfalfa honey season this year, as the crop of alfalfa is very forward and seems likely to bloom abundantly. He expected the flow to be on about June 20, when there would be busy days, and the "hum of the bees in the alfalfa bloom" could be heard on all sides.

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The Bee-Keeper's Guide; Or, Manual of the Apiary,

—BY—
PROF. A. J. COOK.

460 Pages—16th (1899) Edition—18th Thousand—\$1.25 postpaid.

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GEORGE W. YORK & CO.,
144 & 146 Erie Street, CHICAGO, ILL

AMERICAN BEE JOURNAL

ESTABLISH'D IN 1861

THE OLDEST BEE-PAPER IN AMERICA

41st YEAR.

CHICAGO, ILL., JULY 11, 1901.

No. 28.

Editorial.

Are You a Member of the National Bee-Keepers' Association? If not, you should be. But perhaps you would like to know more about it before becoming a member. If so, write to the general manager, Mr. Eugene Secor, Forest City, Iowa, for circulars explaining the objects and work of the Association.

You will remember that last week we began the effort to secure a membership of an even 1000 by the time of the Buffalo convention, in September. Send in the dollars for dues, so we can begin to publish the list of names. We want to receive over 200 during July and August.

Are you a member of the Association?

The Buffalo Convention.—We have received the following notice and information in reference to the next meeting of the National Bee-Keepers' Association at Buffalo:

STATION B, TOLEDO, OHIO, July 1.
MR. EDITOR:—Please say in the American Bee Journal that the next convention of the National Bee-Keepers' Association will be held in the Lecture Room of the Buffalo Society of Natural Sciences, on the 10th, 11th and 12th of next September, commencing on the evening of the 10th. The place of meeting is in the Buffalo Library Building, corner of Washington and Clinton Streets, near the business center of the city.

Railroad rates will vary in the different passenger association territories from one cent a mile each way to one and one-third for the round trip. Each one can readily learn the rate on enquiry at his or her railroad station.

The Buffalo bee-keepers will try to provide entertainment at reasonable rates for all attending the convention who will notify Mr. Sidney S. Sleeper, Holland, N. Y., by Sept. 2. In a letter recently received from Mr. Sleeper, he says:

"We want all who can to come, for we wish to make the Buffalo meeting the most pleasant and instructive one that was ever held in America. We will have the co-operation of all the sciences, as well as the school board; then he names some professional men who are interested in our specialty, and will be at the convention to help; and a long letter from Mr. Hershiser closes by saying, 'Call upon me for whatever further assistance I am able to render;' and Mr. Penton, an ex-president of the Erie County Bee-Keepers' Society, and others, have promised to do all they can to provide for the comfort of the delegates.

As stated in my previous convention notice in the American Bee Journal, there will be no fixed program, and no papers, the time being fully occupied in asking, answering, and discussing questions, except that on the evening of the 12th there will be a joint session of our

Association and the American Pomological Society, to discuss "The Mutual Relations of Bee-Keeping and Fruit-Growing," and Prof. Beach, of the New York Agricultural Experiment Station, and Prof. Fletcher, of the Central Experiment Farm of the Dominion of Canada, will help talk for the bees at that session. It is hoped that much good will result to fruit-growers and bee-keepers from this joint session.

If any bee-keeper who can not attend the convention has any questions he would like to have answered at the convention, will send them to me, I will see that they are presented. I made this same request in my previous convention notice in your journal in April last, and perhaps you'll remember of writing me to the effect that with such a request in all the bee-papers I would be deluged with questions, and in the last week's American Bee Journal you talk very nicely editorially on the same subject, and still I've not received a single question, except about 20 I've sent myself, and I have several more in my mind that I'm going to send to the secretary.

A. B. MASON, Sec.

In-Breeding, as treated by C. P. Dadant in this journal, seems to puzzle Deacon Hardscrabble, a bright writer who has suddenly appeared in the horizon of the American Bee-Keeper. He is confused at the two statements that nature abhors in-breeding, and that "in natural conditions a colony may be several miles from other bees and probably requires all the drones that it may produce." You didn't notice that "may be," Deacon. You know there are exceptions to all rules, and nature doesn't in all cases find things to her liking. She'll remedy that by planting a colony at next swarming-time between the two distant colonies, so that the drones can pass the distance between.

Several Laying Queens in One Hive.—Swarthmore says in Gleanings in Bee-Culture that the secret of success in having several laying queens kept throughout the season in one hive, lies in the giving them all at one time to bees that have been queenless for but three days. "An indefinite number of queens may be confined in boxes or cages arranged in such a way that none can come in contact, yet allowing the bees freedom to go and come, to do as they will."

Watercress Honey.—W. A. D. Pern reports in the British Bee Journal that he gets quite a quantity of honey of very good quality from watercress bloom. He says the bees store very fast from this source, and will fill a super in a few days. We have never heard of watercress yielding honey in this country. Perhaps some of our readers can report on it. We understand that watercress is shipped to Chicago by the barrel, being used as greens.

The Illinois State Fair premium list for 1901 is now issued. A copy of it can be had by addressing W. C. Garrard, Secretary, Springfield, Ill. It will be the 48th annual exhibition, under the auspices of the Illinois State Board of Agriculture.

Under the heading, "Bees and Honey," we find the following list of premiums offered, which are "open to the world:"

	1st	2d	3d
Display of comb honey	\$20	\$15	\$10
Collection of labeled cases containing 12 or more pounds of white honey from different flowers	8	5	3
Collection of labeled cases containing 12 or more pounds of amber or dark honey from different flowers	8	5	3
Case white clover comb honey, 12 to 24 pounds	4	3	2
Case of sweet clover comb honey, 12 to 24 pounds	4	3	2
Case basswood comb honey, 12 to 24 pounds	4	3	2
Display extracted honey	20	15	10
Honey extracting on the grounds	5	3	2
Frame of comb honey for extracting	5	3	2
Display of candied honey	20	15	10
Display of beeswax	15	10	5
One-frame observatory hive dark Italian bees	4	3	2
One-frame observatory hive Golden Italian bees	4	3	2
One-frame observatory hive Carniolan bees	4	3	2
Honey-vinegar, $\frac{1}{2}$ gallon, with recipe for making	4	3	2
Display of designs in honey or beeswax	12	8	6

The judges will be governed by the code of rules adopted by the Illinois State Bee-Keepers' Association.

500 pounds will receive full score for quantity in displays of comb and extracted honey, and 300 pounds in displays of candied honey. 50 pounds will receive full score for quantity in display of beeswax.

Only one entry will be allowed by each exhibitor for any one premium.

There is over \$300 offered to bee-keepers in the above list. For some years there have been very creditable aparian exhibits at the Illinois Fair, and we trust that this year will be no exception. All who can possibly arrange to do so, should begin to plan to make an exhibit.

The State Fair will be held at Springfield Sept. 30 to Oct. 5.

Hot Weather for Honey.—Editor Root says that in the Salt River valley, Arizona, the bee-keepers want the heat to be from 95 to 110 in the shade to get the best results in honey storing. When the temperature is below 90 there is quite a perceptible decrease in the inflow of honey. "Apparently," he says, "the Arizonians want more heat than we of the North. Yet the hottest days, and the hottest nights, seem to be the best in the North for a big flow."

Contributed Articles.

Storing Comb Honey and Surplus Combs.

BY G. M. DOOLITTLE.

A CORRESPONDENT wishes me to tell, through the American Bee Journal, how I would fix for storing comb honey and surplus combs in some building already on a new place he has just moved to, he wishing to make what changes are necessary. As I quite frequently have this question or similar ones asked, I will gladly comply with the request.

For a honey-room the first thing necessary to know is that there is a good foundation under that part selected for the room, and sleepers of suitable strength, so that should we happen to place several tons therein, there will be no danger from breaking down. Knowing this, the next thing is to make the room mouse-proof. This I would have, let it cost what it would, even if I had to line every inch of it with tin, for the filth from vermin about honey is not to be tolerated at all. Having the room mouse-proof, all that is necessary afterward is to be sure the door is kept shut when not in use.

It is better to locate this room in the southwest corner of the building, and paint the outside of the two walls which come next to it, black, or some very dark color, so that the rays of the sun may be so absorbed as to heat the honey-room as much as possible, as the hotter and dryer the honey can be kept, when off the hives, the better it will ripen and keep afterward.

The door to the room should be on the side nearest the general entrance to the building, so as to save as much travel and lugging as possible. Then there should be two windows in the room, one on the south and one on the west side, which are to be opened on warm, dry days, so as to ventilate thoroughly the room and pile of honey. Over these windows, on the outside, is to be placed wire-cloth, so the windows can be left open at pleasure, without any fears of robber-bees. To let the bees out, which may chance to come in on the honey or in any other way, let this wire-cloth run eight or ten inches above the tops of the windows, nailing on strips of lath, or other strips $\frac{1}{8}$ thick, so as to keep the wire-cloth out that far from the sides of the building, thus giving space for the bees to crawl up on the cloth to the top when they are on the outside. With me, no robber-bees ever think of trying to get in at this entrance, their efforts being directed toward the open window, where the fresh scent of the honey comes, and, by so fixing, your room is kept clear of bees, flies, and other insects all the while.

In hanging the door for this honey-room, do not make the mistake that some do, of having it swing into the honey-room, for if you do you will regret it some year when you have a bountiful crop of honey, as it will be greatly in the way at such times, and more or less at all times. Let it swing out into the main building, and hang it so that when you wish, it will swing clear around against the side of the room, thus being entirely out of the way.

On either side of the room fix a platform for the section honey, which should be at least six inches above the floor. This platform should be built nearly as solid as the floor has been, and should be so arranged that the air can circulate up between and around each section or tier of sections. Or if you store the honey away in the supers, then, no matter what style of super you may use, this platform is to be so arranged, that each super is separated from its neighbor an inch or so at the bottom, top, and all around, so that the air can circulate all through and all about the honey, thus curing and ripening it thoroughly. Many fail here, and after working hard to produce a crop they let it deteriorate from one to three cents a pound in not properly caring for it after taking it from the hive. And not only that, but such poor honey generally bought cheaply, injures the market to quite an extent for others. When fixing it costs little more to have it so your crop is always growing better, instead of becoming of less value, and after once fixed, the labor required for universally sending off a good article is not so great as it is to fix up that which has partly spoiled after its production.

Then you wish your honey stored and piled as above, so

that the fumes of burning sulphur, or something of a similar nature, can penetrate the whole pile, should it be necessary to fumigate on account of the larvæ of the wax-moth being liable to injure it. Don't be afraid of a little extra work or expense in fitting up this room, for on it hangs as much of your success as the producer of fine comb honey, as on any part of the pursuit.

And now about the room or closet for all frames of comb not covered by the bees, or not in use in the hives. In some convenient place, on one side of the building, spike on 2x4 scantling, just as far apart as the top-bar of your frame is long, using as many of these as you think you will ever have use for. Now nail strips of stuff, 2 $\frac{1}{2}$ feet long by five inches wide to these studding, letting them stand out into the room in a horizontal position. Let the distance between each strip from top to top be two inches greater than the depth of your frame, so as to give sufficient room to manipulate the frames handily. Three inches from the ends of these strips run a partition clear across the space occupied for the purpose of storing these combs, which partition is to have close-fitting narrow doors placed in it, spaced so as to be most convenient. Close up the ends, and see that top, bottom, ends and sides are as nearly tight as possible, so that in fumigating there shall be as little waste of the gases as may be.

Now hang in the combs whenever you have any not occupied by the bees from any reason, and see that all combs not in use are in their place, and not lying about somewhere else. As often as any signs of worms are found, put in a pot of burning sulphur, close the doors, and the work is done.

Onondaga Co., N. Y.



Is a \$200 Queen a Fake?—Queen Values.

BY DR. C. C. MILLER.

ON page 391, G. M. Doolittle has gone beyond anything I have seen in print in showing that there may be justification in placing a very high price upon a queen. Granting his premises, the extra 10 pounds of honey and the 4,000 queens, it is hard to get away from his conclusion that "we have \$3,750 as the worth of that queen."

Coupled with that is a repetition of the strong intimation on page 293 that the A. I. Root Co. are in the fake business when they advertise that they have a \$200 queen. Mr. Doolittle refers to it as being like the work of a fakir, and says a fakir is a "street vender." Looking at the dictionary I find that a *fa-k-e-r* is a street vender, and a *fa-k-i-r* is "one who originates a fake, humbug, or swindling contrivance." Mr. Doolittle's line of argument is somewhat hazy, but clearly discernible through the haze is the intimation of dishonesty on the part of the A. I. Root Co.

Mr. Doolittle makes the rather strange assertion, "There is no value in a dollar." If that be true, then there is no value in \$200, and he should hardly find fault with attaching to a queen a price of "no value." But he seems to object to a queen "having only a dollar-and-cent value attached to her," and says, "the simple saying that this queen 'is worth \$200' without any qualification... expresses no value, save that which comes from the wear and tear of the lungs doing the hawking." Elsewhere he says, "But not to appear as a fakir, we should know that the queen has *real value* in the work accomplished by her bees and those from her queen daughters, putting that work out to the world as her real worth, rather than saying that 'we value her at so many dollars.'"

It is not entirely clear just what it is to which Mr. Doolittle is making objection, but it sounds a little as if he were objecting to placing upon an article a value in dollars and cents. Surely he can hardly object to a thing which is absolutely necessary to the transaction of business, and without which the wheels of commerce would stand still. Mr. Doolittle himself puts a dollar-and-cent price on the queens he sends out. O. L. Hershiser told me he got a queen from Mr. Doolittle that Mr. Doolittle said was worth \$50 to a breeder. What wrong was there in that? The dollar is the unit of value, and there is no other way by which he could in so few words express the value he placed upon that queen than to say how many dollars she was worth. And if it was right for him to say she was worth \$50 because her progeny were beautiful (I saw them, and they were beauties), is it wrong to say another queen is worth \$200 if she really possesses such value? Again, on page 380 of the American Bee Journal, H. G. Quirin advertises a Golden Breeder from Doolittle, saying that Doolittle says, "If there is a breeder of golden bees in the U. S. worth \$100,

this one is worth that sum." Notwithstanding the condition attached, there is the value "at so many dollars."

There seems no impropriety in the universal custom of naming values in dollars and cents, the only question being whether the article is really worth the price named. The fact that some one else may lyingly say he has a queen worth \$1000 when she is not worth one-tenth of that sum, although it may have some bearing upon the policy of the case, has none upon its honesty, and it is the honesty rather than the policy of the A. I. Root Co. against which Mr. Doolittle is training his guns.

If he thinks \$200 is too large a valuation for the queen in question, he has a right to say so, and to show cause why it should be lowered. That valuation appears to be based upon length of tongue and increased harvests. Taking Mr. Doolittle's figures and using a simple proportion, we have \$3,750 is to \$200 as 10 pounds is to 8½ ounces. So according to Mr. Doolittle's estimate, if 4000 queens are reared from the queen in question, and one out of four of them makes an increase of a little more than half a pound in the annual harvest, then \$200 is none too high a valuation to place upon such a queen. McHenry Co., Ill.



Co-operation—What it Has Accomplished for Our Bee-Keepers.

Read at the Longmont meeting of the Colorado State Bee-Keepers' Association, April 30, 1901.

BY W. L. PORTER.

I PRESUME there are few bee-keepers present who have not been thinking of a plan by which we may sell our honey and buy our supplies in a co-operative way. The fact that we are so far from markets in the East, where our honey is to be sold, makes it quite necessary that we should sell our honey in a combined way. Freights are so high that we must ship our honey in car-load lots.

Over two years ago the State Association called a special meeting for the purpose of organizing a co-operative association. On investigation it was found that, to do business under the statutes of Colorado, it was necessary to form a stock company. Hence the bee-keepers organized themselves into a stock company with a capital of \$10,000, a share being \$10. It was voted to name this "The Colorado Honey-Producers' Association." A constitution and by-laws were adopted and the Association was incorporated in January, 1899.

Before co-operation was entered into, the tendency was for the price of honey to be lower each year. For ten years I have noticed this to be the case, so that in 1897 I was compelled to sell my crop of fine honey at \$1.70 for 24-pound cases. At this time the Denver Bee-Keepers' Association decided that something must be done to better this condition. We advanced a small sum of money and one of our number opened a correspondence with parties in the East. At the same time we pledged our honey, provided we could get the purchaser to come on and examine the honey and pay cash on delivery, if satisfactory. We were successful in getting buyers to come on and we sold our honey in the far East at better prices than we could otherwise have realized.

The Colorado Honey-Producers' Association, upon opening for business, found it a difficult task to get the honey together, as it was very much scattered through the country, and we at once saw that it was necessary to have a warehouse, and a room was rented. The first year, the manager was at the wareroom two days in a week to receive the honey, and it was brought and placed on deposit, a receipt taken for the same, and the honey was kept fully insured. There was some opposition from the commission-houses, as they thought we would have all the honey-business and leave them out. But at present they are very friendly, as they say the price of honey is more stable since we have organized. They see that it is a real convenience; when they have a jobbing order to fill, they know where they can get the honey to fill it, and can see the honey displayed, and get just what they want.

At this time it was hard to make many of the bee-keepers understand that it would be to their advantage to sell through the Association. They were also skeptical as to receiving any rebates.

Perhaps it would be well for me to explain here that at the first meeting of the Association, it was voted that one-half of the dividend should go to the stockholders, and the other half to be divided pro rata per case of honey. This was found to be an unjust division as some of the stock-

holders did not sell any honey through the Association. Yet when the adjustment was made the man who had a ten-dollar share got \$8.50 dividend. So at the annual meeting, 1900, the by-laws were changed so that Sec. 10 reads:

"Any surplus money accruing over and above the expenses of the Association shall be divided as follows:

1. A dividend of one dollar shall be paid on each share of stock issued.

2. All surplus honey remaining after said dividend has been declared shall be rebated to the stockholders in proportion to the amount of commission paid by them during the year, said dividends and rebates to be paid only to those who have become stockholders previous to August 1 of the year in which surplus accrues."

As you will see by this plan, it is to the stockholder's interest to sell as much of his honey crop through the Association as possible, as by so doing it would not only increase the volume of the Association's business, but also insure him a large share of the rebates. As a consequence, the past year's business of the Association was greatly increased and the rebates covered nearly all the commission charged, so that the members had their honey stored in a proper place where it was always on display, insurance was carried on the honey while in storage, and the honey was sold and loaded on the cars, the money collected for it, and all of this was done at an expense of only one-tenth of one percent to the stockholder. This proved very satisfactory to the members. It was also satisfactory to the buyers, as it is better for them to have the honey stored where it can be displayed and they can see it before buying. It saves them time and expense in canvassing the country to buy the honey, and when the honey is stored at the railroad it can be easily loaded at short notice.

The producer is benefited in another way. When a buyer comes here he is at an expense of at least \$10 per day, and that must be paid by the bee-keeper.

Our difficulties have not been with competitors or in finding market for honey, but to inspire faith in the doubting bee-keeper. Instead of its being hard to find a market for the honey, it has been hard to get the honey to fill the demand created. But the two years' business has given us confidence. I don't know of a single member who has given his patronage, that would wish to sell outside another year. Of course we must take into consideration that last year was very favorable for us. Honey was scarce in most sections, and we may have years when it will take the whole ten percent commission to run the business. But should we have an unfavorable year, there are still great advantages in associated work. Buyers, when honey is cheap and plenty East, will not come here as they did last year. But if we are organized we can take our honey East and lay it down in the market at whatever price the producer is receiving. We are on an equality with him, and the rare excellence of our honey is in our favor.

I have now given you a brief history of the workings of the Colorado Honey-Producers' Association. I wish now to point out the possibilities of co-operation, and the obstacles in the way. As to the possibilities, I believe we can find a market through the Association for all honey except that which is required to fill our local demands. Each bee-keeper should try to encourage home consumption, and sell as much in this way as he can, at the same time holding up the market. After that is done, he can market his remaining crop through the Association cheaper than he can do it himself. This has been my experience. In past years it took a good deal of time to deliver in small lots to my customers, and very often I had to stop in the midst of urgent business to deliver a single case of honey. Trade is exacting and must be attended to. Now I deliver to the Association, have no more bother, and receive a better price. This can be true of every bee-keeper in the State. To illustrate this I wish to give you an example: Lately, a bee-keeper in a remote place, wrote us that he had a large amount of comb honey. He had sent agents to Denver several times, and they could not place the honey. He finally put it in our hands. By the time the honey reached Denver, it was sold in the East at good figures, and the draft was on deposit at the bank in Denver to pay for it. This I consider quick work.

I wish now to point out some of the difficulties: It costs money to do this work. To go into the office you will see on file hundreds of letters that have been promptly answered, telegrams and long-distance telephone messages that have been expensive. We issue, also, a crop report. We receive bulletins, posting us on the crop of honey from Colorado, Utah and Arizona. This report is paid for. Money, money, is what it takes to carry on business. We

seem to have some members who do not understand this, and more that are not members that don't understand it. They come to us like this: What are the prospects for honey this year, and what is the condition of the market? I have a crop of honey to sell. I wish to co-operate with you. I wish to sell my honey myself. I don't wish to undersell you. What price shall I hold at?" All this information he comes for has cost the Association hard money. But wherein does he co-operate when he does not offer a cent for this valuable information?

The question that is to come before you is, "How can we organize throughout the State and make an equal and just distribution of expense to all concerned?" To make co-operation a success, *all* must co-operate, otherwise there is friction. To have a successful, intelligent and just co-operation throughout the State, there should be a certain office with a manager in charge who will find out, first, the supply of honey throughout the country, so as to know the condition of the market. He should then be posted on the amount of honey we have in our Association. He is then in shape to negotiate in different parts of the East so as to sell at the best possible advantage.

Now that we have the central office working, we will proceed to organize local associations, which are to be a part of the main association. This local association shall have an office the same as the main one; shall also have a management to correspond with the main office. He shall receive all the honey and see that it is properly graded and classified. He should ascertain how much each member has, and report the same to the general office as soon as possible. The manager of the local point should rent a place for storage and should send a printed notice to each member, saying on what day or days of the week he will receive the honey. Then on the designated days (say Friday and Saturday) he can be there and take the honey. One day in the week will make the expense light, and in small towns storage can be rented quite cheaply.

When the honey is ready he should see to loading the car and billing it out. All this to be done under instructions from the general manager. This expense of rent, salary, insurance and of loading should be paid from the general office.

The freight from all points in Eastern Colorado is the same, hence all will pay to the central office the same percent for selling the honey. That is, the general office pays all expense for storage, salary, etc., and the producers in all parts of the State pay the same for handling. To be sure to have all expense paid, we will say we make the commission ten percent. Then at the annual meeting in January, we have the business summed up and a rebate declared to each member, proportioned according to commission he has paid. This will be absolute justice to each member, and if our local association has only a part of a car it can be loaded and shipped to the association in the next town. In such a case, there is a charge of five dollars for switching the cars; this to be paid by the local association that has only part of a car, and in case each town has only a part of a car this expense should be borne equally by them.

Co-operation carried on in this way will enable the general manager to do all the corresponding with parties East, and perhaps sending a few telegrams. Unless there is harmony among the local associations, such as I have described, there must be friction, the same as we had when selling as individuals. Buyers will take advantage of this and we lose the good that should come through co-operation.

So far, I have not touched on the supply business. This can be managed the same as the honey. If local points wish part of a car, they can have the car so loaded at the factory, that part can be discharged at one station and part at another, and pay a little extra to have the car moved to the next point, and parties at this point should pay the extra charge. I would also suggest that the local managers be directors and should meet in conjunction with the board of directors, elected by the Association. The membership fee of the local association should be the same—ten dollars. This should go to the State Honey-Producers' Association. Each division should be known by letter, as, for an illustration, Longmont, Division A; the next locality that organizes, Division B. Such an organization throughout Colorado will enable us to do business in a very intelligent way. The expense for negotiating the sales of the whole crop done through one head will be but very little more than for a part of the crop. The price can be maintained because we are not selling against each other. The larger we can make our Association, the more widely will our influence be felt throughout the country.

We soon would be a concern that would be known by every buyer throughout the land. We would be a powerful factor in selling honey in our own State, as we would have strength enough to push our products into the most remote parts of it. We would classify our honey and have a brand, which, when established, would be always called for, as people would know exactly what to order, and would know that the honey would be the same each time.

I hope that we may have an organization that will be patronized by all. It is surely true that an organization of this kind will benefit every bee-keeper that produces a pound of honey to sell, whether he supports the organization or not.



No. 7.—Practical Lessons for Beginners in Bee-Culture.

BY J. D. GEHRING.

(Continued from page 408.)

MR. BOND drove into our yard the next morning while we were yet at the breakfast table, and proceeded to unhitch his team without waiting for an invitation. Hastily excusing myself to my family, I went out and found him tying his horses at the watering-trough, about 50 feet distant from his wagon. As he came to meet me he began the following explanation:

"I'm on hand earlier than you expected, you see. Well, when I got home last night and explained things about my all-day's absence my wife laughed and told me that she and Harry had done some bee-business, too. 'The little fellow,' she said, 'while playing in the grove, found a large swarm of bees hanging to a limb of a small tree; and we hived it.' Well, when I went to look at it the idea came into my head like a flash, that the best thing for me to do with that swarm would be to bring it along with me this morning and get you to put it into one of your hives for me. Then I could take it back home with me in the evening. There it is," he concluded, pointing to the wagon. "I tied it up in a sheet to keep the bees in the hive. But some of them got out in spite of my precaution.

"I expected they would attack me and the horses, but they didn't; they just flew around about the hive, and somehow managed to keep up with the wagon till I got here. But, you see, more and more kept coming out. That's the reason why I was in such a hurry to get the horses unhitched."

"That's a new idea of yours, Mr. Bond," I replied. "But I'm thinking that the scheme will not work out as you have planned, because I have an idea of my own about it: I'll furnish the hive and tell you what to do, but I shall expect you to do the work of transferring the bees. First, however, it will be proper to put your horses in the stable, for the job will have to be done right here; or near by, at any rate."

"You see, Mr. Bond," I continued, seeing by a look in his face that he did not approve of my plan, "if we carry that bundle of yours over to the apiary and you do the transferring there, all these bees here that are flying around where they know the hive to be, will be lost to the swarm, because we can't make them follow us. That loss you can't afford, for, as you see, there are now several thousand outside, and more coming out all the time. There is no help for it, that I see, and no time to be thrown away in discussing the matter; therefore, while I go and get a hive, and my smoker, and a bee-veil for you, you hurry those horses into the stable. I'll be back inside of five minutes."

Well, to tell the story as briefly as possible, inside of 30 minutes Mr. Bond's bees were contentedly humming within and near one of my 10-frame hives. Quite naturally he regarded those flying bees as very dangerous enemies until I explained to him that bees thus situated never, or seldom, attack any one.

After carefully adjusting his bee-veil I assisted Mr. Bond in lifting his unique bundle out of the wagon, and together we carried it to a shady corner of the barn-yard, where I had placed my hive. Setting it down he—following my instructions—untied the corners of the sheet and laid the ends out flat, one end toward the new hive and as close as possible up to the bee-entrance. Then he tipped the box over and carefully laid it on its side, with the open end, or bottom, toward and near to the bee-entrance of the new hive. In the top-end of the box-hive had been bored two one-inch holes for bee-escapes, which were plugged. Withdrawing these plugs Mr. Bond began blowing smoke

into the hive, thus driving the bees out and toward the receiving-hive.

One thing, however, I did to assist Mr. Bond: With a small copper scoop, such as grocers use in handling teas, which I had brought from the house with me, I transferred a lot of bees from the body of the box-hive to the new hive, putting two scoop-fulls in among the frames. This established bee-connection between the two hives; and the bees were not slow in seeing it.

Let it be understood, however, that I did not forget to direct my pupil's attention to the fact that there was only one right way to use that scoop without irritating the bees and killing many of them.

"It wouldn't do at all to scoop up bees as you would potatoes," I explained to Mr. Bond. "It has to be done in such a gentle, careful, and yet quick way, that the bees will not find out they are being scooped."

"Now, Mr. Bond," I said, after most of the bees had been driven out of his hive, "there are quite a lot of bees inside that box of yours yet, and the best way to get them out and into the new hive is to tip your box bottom-side up. They will soon all be on the wing, unless the queen is yet with them—that, however, is not probable. In a few minutes you will see that these, and the bees flying about where the wagon stands, will have united, and gradually all of them will go in where the queen is with the swarm.

"This evening you can take them home with you safely and in good shape; but not done up in a sheet, Mr. Bond. I'll show you a better way."

"What do you do that for?" asked Mr. Bond, when he saw me set a piece of board slantingly against the front of the new hive.

"I do that," I replied, "in order that the bees that fly out will mark the location of the hive before leaving it. It is not necessary to do this when a swarm is first hived. But when a hive of bees is moved from one location to another, or a colony is transferred from one hive to another and the location changed, it is always best to take this precaution; because without it many of the worker-bees will never find their way back to the hive after leaving it from a location they have never marked."

"Well, Mr. Bond, you have had a very important practical lesson in bee-keeping this morning; and without getting any stings, I believe. We are now ready for something else. I want you to learn about drones to-day. I presume you remember what I said yesterday about looking after drone-brood in the parent hive of that swarm we hived. Well, that's where you will get your next lesson.

"Here you see the lesson that's before you now," I said to Mr. Bond, pointing to the super on the brood-frames of the old hive, after I had removed the cover."

"That super has to be removed before we can properly proceed with our drone-lesson. That is plainly apparent to both of us. Well, here you have a first-class chance to learn one of the important lessons in bee-keeping. It is something that can't be avoided without detriment either by the great or small bee-keeper. If you should conclude to keep only one colony of bees you must, if you want surplus honey, learn how to put on and take off supers. This interesting and important lesson is now before you."

"All right, I'm ready!" exclaimed Mr. Bond, enthusiastically. "What shall I do first? Smoke into the hive to make them fill up?"

"No," I replied, "the bees in this hive are nearly all baby-bees and don't require heroic treatment. The first thing is, to pry the frames loose from the super with this chisel. If the bees then make a rush toward you, don't dodge, but give them a little smoke. They are rather timid, and easily subdued."

"Then you lift the super off and set it down on top of the cover there"—pointing to the cover I had just removed from the hive—"but in setting it down please be careful that none of the bees on the under side are crushed. That can be avoided by setting the super down rather slowly, and very carefully, thus giving the little things time to get out of the way."

"Be careful now, Mr. Bond!" I cautioned, when he bent down to lift the super. "Make sure that you get a good hold at each end before you lift: because if your hold slips you would quite likely have another fracas with my bees, worse than the first."

"I thought you said, just a minute ago, that baby-bees wouldn't sting," remarked Mr. Bond, looking up, his eyes twinkling mischievously.

"I beg your pardon, Mr. Bond; but I did not say that, exactly. Such an event as your dropping that super was not then thought of. I think there are lots of bees in that

super, and in the hive, too, that are old enough to sting if you hurt them and smash their treasures.

"Besides that, Mr. Bond, I wish to impress this upon your mind to serve you in the future as a bee-keeper: Bees rank very high in the insect world in the degree of intelligence they possess. I have always been guided by that idea—which to me is a fact—in any manner of handling my bees. I believe that bees—young bees—can be spoiled for life by ill-treatment; about as babies are generally spoiled by the wrong kind of treatment, beginning almost as soon as they are born. Now, right here we have a good illustration, which I shall use in order to fix the principle of the matter upon your mind.

(To be continued.)

Questions and Answers.

CONDUCTED BY

DR. C. C. MILLER, Marengo, Ill.

(The Questions may be mailed to the Bee Journal office, or to Dr. Miller direct, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.)

Swarming-Time Troubles.

What is the matter with me or my bees? I have had eleven swarms and have but two left. They all settled once, except one, and were easy to hive. Some would come out again the same day, and others the next day. Some I put in the third time and then they went away. I clipped the wings of one queen, and still they went away and left her.

My hives are of my own make—Langstroth size, made of white pine with white poplar frames, and foundation starters.

ILLINOIS.

ANSWER.—I don't know what is the trouble, but can make a pretty safe guess. The great probability is that your bees would not stay in the hive because it was too hot for them. A cool, shady place for the swarm will help matters. Even in a dense shade it may be so close, with so little chance for a breeze, that I have known combs to melt down in a hive where the sun never shone. On a very hot day, after a swarm is hived, it helps to cool them off to sprinkle well the hive with water. Perhaps more than anything else it is important to see that there is abundant ventilation in the hive. Raise the hive on blocks half an inch to an inch, and at least for a day or two leave the cover partly open, so the air can pass readily through the hive from bottom to top. If the hive must be out in the sun, provide shade for it in some way. Boards laid across the top, weighted down with a stone will do in place of a regular shade-board. An armful of long grass laid on top, held down by two or three sticks of firewood, will answer a good purpose. Some give a frame of brood to a swarm. They are not so likely to desert brood.

I can hardly think the bees absconded without that clipped queen, or some other queen. They may have gone back to their old hive; they may have gone into another hive; or they may have gone off with a young queen which joined them.

A Half-Dozen Questions.

1. How do you separate the honey from the comb in old combs, without an extractor?

2. What is a Van Deusen wax-tube? What is it like, and how used?

3. How do you fasten foundation in shallow extracting frames, 5x18 inches with a groove in the middle of the top-bar, and how do you use wax and rosin in fastening foundation?

4. There was an article in the American Bee Journal of June 6, by F. Greiner, on the management of out-apiaries, where he furnishes them a new hive with six Langstroth frames, with starters. (The supers, he says, should be put over an excluder, which, however, may be taken off after a week's time.) What is the super for? I suppose it has been on the hive and he is putting it back.

5. I have some Langstroth frames with thick top-bars,

and grooved for wedges. When the wedges are taken out, doesn't the partition come out and make the frames of no account? It looked that way to me.

6. How about the beveled top-bar?

TENNESSEE.

ANSWERS.—1. I don't know of any satisfactory way except to let the bees empty out the honey. Of course you can melt the whole business, but you will not get a nice article of honey.

2. One of the bee-supply catalogs, says of the Van Deusen wax-tube: This is a very convenient tool for fastening foundation by the melted-wax plan. It is a tin tube for holding and running out melted wax.

3. Slip the edge of the foundation into the groove, then run melted wax along, or drop a few drops at intervals. Another way is to crowd a string down into the groove beside the foundation. You can use wax and rosin half and half, but it is much better to use pure wax. Years ago I used wax and rosin, and then when I wanted to melt up an old comb I had to throw away the upper part, for I didn't want wax mixed with rosin.

4. The super is for the bees to store surplus in. The excluder is to keep the queen from going up into the super. After the brood-nest is established in the lower story the excluder can be taken away, but of course the supers remain.

5. I don't see why the partition should come out when the wedge is taken out, and I don't see that it would matter much if it did. What do you want to take the wedge out for? When it is put in once it ought to be built in by the bees and last a lifetime. If the time should ever come that you would want to replace the comb with foundation, I think you would want a new frame, too. I have had combs that have outlasted the frames, and I have put old combs into new frames, but I don't remember ever putting foundation into old frames.

6. I think they are not liked as well as formerly. For my own use I much prefer no bevel.

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Newly-Hived Swarms Deserting.

I have had two large swarms. Of the first one I put some comb in the frames before I hived it, and a couple of hours afterward they left. On examination I found the comb had broken from its fastenings, and lay in the bottom of the hive. The second I let go a week before disturbing, and then only to straighten the comb, of which there was a large quantity partly filled with brood and honey. Two days afterward they left the hive; after settling I put them into a new hive, and they are apparently contented. On examining the hive they left, I found comb that had broken down—a piece about six inches square. The weather is warm. Do you think it the right thing to work with them in hot weather? The hive they left had a double handful of bees, part of which are working. Would they develop a queen? I have no frame of bees to give them.

INDIANA.

ANSWER.—There is very little for doubt that there was no trouble except that the hive was insufferably hot. At all times it is important that a newly hived swarm shall be kept cool and well ventilated, but the remarkably hot spell that occurred at the time you mention made it especially emphatic. Ordinarily a swarm is safe to remain after the queen has begun laying, but in such exceptionally hot weather, resulting in the breaking down of combs the heat may be sufficient to drive the bees out of a hive in which even a good start has been made. The breaking down of that comb did not drive the bees out of the hive, but the heat that made it possible for the comb to break down was what did the business.

Yes, a double handful of bees may rear a queen if they have eggs or larvae less than three days old, but it is not likely to be a very good queen reared by so small a number of bees. It is likely, however, to be a better queen reared in such scorching weather than one reared by the same number of bees in cooler weather.

As to its being right to work with bees in hot weather, if there is anything to be done with them the hotter the better so far as the bees are concerned. The only thing against the hot weather is the discomfort of the bee-keeper. As I write this the thermometer stands 99 degrees in the shade with a chance that it may be higher later in the day, and I am eager to get out to work at the bees. But that does not say that the bees should be kept as hot as possible in their hives. Raise the hives half an inch to an inch

from the bottom-board by putting a block under each corner. It may be well to raise a hive still higher when a swarm is hived, and the cover may be left partly off for two or three days, so that a draft of air can pass directly through the hive. Sprinkling the hive with cold water will bring temporary relief. In the case of your swarm which left the hive after occupying it a week, the probability is that there would have been no such desertion if the weather had been normal, or if you had raised the hive.

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The Afterthought.

The "Old Reliable" seen through New and Unreliable Glasses.

By E. E. HASTY, Sta. B Rural, Toledo, O.

MR. DONALDSON'S SWARM-CATCHERS.

Nice-looking swarm-catchers for a nice-looking apriary, and a nice report Mr. Donaldson makes of their success, Pages 305, 312. Other swarm-catchers of the same patent have been known to fail, however. Get to play—and then no sound less than thunder, and no sight less flamboyant than a regiment of soldiers marching close by, would be altogether sure of attention.

WATER, POLLEN, AND HONEY.

Man's mouth calls for two indispensables—food and drink; and therefore he easily forgets that the bee's mouth calls for three indispensables—water, honey and pollen. It appears that when he supplies the two former abundantly, and they can not find the latter in the fields, nuclei swarm out at a terrible rate, and he, perchance, scratches his head and can't imagine what's up. Page 319.

THAT PROPOLIS CHAP.

Aha! That chap offered 25 cents a pound for propolis because he didn't intend to *pay* anything. Told you so. Put the price high to get many offers; and figured (correctly) that some of them would consent to the bargain of pay on delivery. Page 322.

NATIVE BREEDS NOT ALWAYS BEST.

The maxim that the native breeds of a country are the most fit for that country (as per page 323) is liable to some very heavy discounts. That which is the most fit to run wild is *usually* not the most fit under man's care. Again, aboriginal fitness is often only the lack of severe competition. Most countries have their native rats; but they all have to yield to the Norway rat when he comes around. Most countries have their corresponding little birds; but they all have to yield to the English sparrow when he comes around. South America has a great many species of honey-storing bees (*Meliponas*, *Trigonas*, etc.), but they will doubtless yield the ground, to a great extent, to the foreign bee with which we are familiar. The same may apply to breeds as well as to species. Had South America a breed of *Apis mellifera* it might be nearly on a level with the *Meliponas* and *Trigonas*, and much inferior, even on its own soil, to the foreigner.

COMMENTS ON DR. M'LEAN'S SUGGESTIONS.

I incline to tell the doctor (Dr. McLean, page 324) that if he mixes a pound of honey with a quart of water it will be likely to get spoiled long before a family will take it up a spoonful at a dose. Say one-fourth of the quantities.

Canton flannel to hold honey on the skin for medicinal objects, eh? Thanks. But when honey is used for stings it will hardly do to have it in the nap of flannel, as the main object then is to keep the pores of the skin from letting in air.

MR. DOOLITTLE AND OUR COUNTRY.

Anent Mr. Doolittle's lost \$4,000,000,000. I'm glad the old motto has been amended. It used to be, "Figures can not lie." Now it reads, "Figures seldom do anything else but lie." Not *quite* sure we need the amendment *this time*. Thousands go pleasureing in Europe with full pockets and come home with empty pockets. Millions of cash have been sent here for investment, won large profits, and then went home profits and all. Many millions every year are sent abroad as interest on all sorts of bonds and things—and that's the last of those millions. Once in awhile a rich American (Waldorf Astor fashion) expatriates himself, millions and all.

Oftener still, a rich American sends millions to a worthless foreign count—and throws in a daughter. (Last item small loss to the continent.) If we added all this together without any rebates we should get quite a total, sure enough. Glad we have a country big enough to stand it all—stand it all as ox in pasture stands the loss of blood the flies take—stand it all and yet make actual progress in changing from a debtor nation to a creditor nation. And when the aforesaid change is complete some of the above boot-ses will be on other foots. Page 326.

THE LOSS ON SECOND-HAND CANS.

Perhaps you've heard the prosy preacher (who has an hour to fill and not the matter to fill it) say—"a-a-and"—with pauses and emphasis. It seems Mr. Whitney lost a few dimes on some second-hand cans he bought, "a-a-and" ten dollars on the honey he ventured to put inside. "And" is sometimes a major instead of a minor among the parts of speech. Page 306.

The Home Circle.

Conducted by Prof. A. J. Cook, Claremont, Calif.

THE KALAMAZOO OF CALIFORNIA.

I have spent Sunday in the Kalamazoo of Southern California. Some one will say Pasadena, but it is not. It is even more to my mind than is lovely Pasadena. It is none other than

BEAUTIFUL REDLANDS.

As we look up from San Bernardino to the East the Sierra Madre Mountains form a U, and the incomparable city of Redlands nestles right in the bend of the arch. San Bernardino Mountain, "Old Gray Back," the highest mountain of Southern California, ever stands close by, and ever looks down in kindly mien upon beautiful Redlands. The Smiley brothers—Alfred H. and Albert K.—visited this place years ago, and sighted a thin, barren hill reaching high up on the southwest of the town, and overlooking a deep pass to the south, through which the Southern Pacific Railroad trends as it stretches eastward between the two great peaks, San Bernardino and San Jacinto.

These great-hearted and far-seeing brothers, whom to know is to love, at once saw the possibilities of what are now famous as "Smiley Heights." They purchased the barren hill site, carried thither brains, taste, water, cultivation, and all kinds of beautiful plants, and to-day those old, barren hill-sides are transformed into marvels of beauty. To stand on "Smiley Heights," and to look down upon the beautiful homes often almost hidden amidst the most beautiful and thriving orange orchards known to the world, is to view a scene of incomparable beauty.

I hardly need to say that all Redlanders take pains in adorning street, home grounds, and homes. All this touches the refinement and sweetens the life and heart. I have been privileged to look in upon those homes, and share their hospitality. Theirs are such homes, and theirs such home-circles, as taste and beauty must ever fashion. Oh, that there were more Smiley's to set the pace, and more laymen to follow in their wake, that we might have more of beauty and loveliness about our homes; that we might have more of cheer and loveliness in our hearts. Few of us have the wealth to fashion such grand parks as are seen on "Smiley Heights," but all of us can help to make a lovely home, and can thus do our little part to make a more beautiful world, and more lovely people.

As I write I look out from my window over the city. I can only see parts of houses, for trees are everywhere. Indeed, all Redlands is a magnificent park, set down in which are cottages, or palaces, as the pocket-books of the owners permit, but all are chaste and beautiful.

Why are there not more Redlands in the way of wooded street-sides and home surroundings? Only because we do not arouse to the fact that such beauty gives richest pleasure, and, better still, touches the heart only to refine and sweeten.

There is another side to this picture. Redlands is perhaps the most thrifty city in Southern California. Of course, that must follow as light the sun. Men everywhere are touched by master-pieces of beauty. They look upon them to admire, to long for, to possess. The uncanny features of wealth are softened, subdued, often erased altogether by a

love of beauty. Thus our Redlands, while they capture the wealth, secure the best and only true aristocracy of wealth. And thus the wealth is turned into the best channels, and we find a society not only cultured in mind but in heart. It has been my happy privilege to address the people of nearly every part of Southern California, and, as we should expect and know, I find no folk anywhere more delightfully responsive and eager to know than are those of beautiful Redlands.

THE GARDEN.

I wonder if all our home circles appreciate as they should the wealth of satisfaction that comes from a well-kept and productive garden. I have thought of this over and over, as I have picked of late, morning after morning, the luscious blackberries and the great, meaty Logan berries. I have wondered where they all come from. Only a few bushes, and get all we want, and some for the neighbors. How little work and how much fun. I wish all the home circles could hear my merry whistle as I pluck those great handfuls of delicious berries. I am sure they would all wish to whistle in like environs. True, the prickers are there, but the smart is dulled at thought of luscious pies at noon-time, and delicious jam at the tea-table.

I love the blackberry garden. It warms up my whistle in the early morning; it gives me just at the wake-up of the day a chance to be useful, and all for the loved ones who mayhaps are yet all unconscious in sleep; it rejoices me that it will relieve the burden of the dear housewife as she marvels how she can add to the savory dishes or break the monotony of the tea-table, or help out at the dinner hour. If I had small boys—my boy has now his own berry garden—how good to let them hoe, and water, and pick, and receive from papa the very top figure for the very finest berries ever grown!

AND PEAS, ALSO.

I said berries, but I did so only because they seem a little more "tony." I think my whistle is quite as merry among the great rows of prolific peas. It is so difficult to get peas right from the market. It was old Izaak Walton, the man who loved to fish, who said, "Doubtless God might have made a better fruit than the strawberry, but doubtless God never did." Change fruit to vegetables, and strawberries to peas, and I will give a good, warm amen to the sentiment. There is something pretty satisfactory in a right good mouth-water. Well, I just have that all the minutes I am picking the peas. It just seems to hang on the whole forenoon in a kind of unconscious anticipatory getting ready for the most savory dish of peas, that graces most the dinner-table.

ASPARAGUS.

I sometimes wonder if the peas are jealous as they see me look longingly over to the asparagus plants, or hear me whistle jubilantly as I cut the great fleshy stems, that seem to rival Jonah's gourd as they stretch up in a night. I commiserate the home that has not its asparagus garden.

Our Wood Binder (or Holder) is made to take all the copies of the American Bee Journal for a year. It is sent by mail for 20 cents. Full directions accompany. The Bee Journals can be inserted as soon as they are received, and thus preserved for future reference. Upon receipt of \$1.00 for your Bee Journal subscription *a full year in advance*, we will mail you a Wood Binder free—if you will mention it.

"**The Hum of the Bees** in the Apple-Tree Bloom" is the name of the finest bee-keeper's song—words by Hon. Eugene Secor and music by Dr. C. C. Miller. This is thought by some to be the best bee-song yet written by Mr. Secor and Dr. Miller. It is, indeed, a "hummer." We can furnish a single copy of it postpaid, for 10 cents, or 3 copies for 25 cents. Or, we will mail a half-dozen copies of it for sending us *one new* yearly subscription to the American Bee Journal at \$1.00.

Why Not Help a Little—both your neighbor bee-keepers and the old American Bee Journal—by sending to us the names and addresses of such as you may know do not now get this journal? We will be glad to send them sample copies, so that they may become acquainted with the paper, and subscribe for it, thus putting themselves in the line of success with bees. Perhaps you can get them to subscribe, send in their dollars, and secure for your trouble some of the premiums we are constantly offering as rewards for such effort.

To Our Shippers.

About May 1st last, we removed our business from the buildings 120-122 W. Broadway to larger and more commodious quarters at Nos. 265-267 Greenwich St., and 82, 84, 86 Murray St., and we duly sent to our friends in the trade a notice of our removal. Shortly after we vacated the premises (120-122 W. Broadway,) one Joseph M. McCaul, rented a portion of our old quarters, and hung out a sign, "Hildreth, McCaul Co., Jos. M. McCaul, Prop.," with other large signs to the effect that his business is "headquarters for honey, beeswax, maple sugar and maple syrup."

The mercantile agencies report that Jos. M. McCaul is the sole proprietor of the new business, and that he claims to have paid to one Henry P. Hildreth (who has no connection with our business,) a consideration for the use of his name.

We will not comment upon the act of leasing our old quarters and exposing thereon the sign, "Hildreth, McCaul Co.," further than to state that we have instructed our attorneys to apply for an injunction restraining the said McCaul from using the name of "Hildreth" in connection with his business in any manner whatsoever.

We value highly the good name and business we have established by many years of satisfactory dealing with our friends in the trade, and we therefore send this notice so that you may not possibly confound us in any manner with the so-called "Hildreth, McCaul Co."

Our firm name remains as heretofore, and all our business is carried on at our new quarters—

**Nos. 265-267 Greenwich Street,
and Nos. 82, 84, 86 Murray St., New York, N.Y.**

Respectfully yours,

HILDRETH & SEGELKEN.

DO YOU WANT A HIGH GRADE OF Italian Bees and Queens?

2-frame Nucleus with Untested Queen, \$2.00, purchaser paying express charges.

Naperville, Ill., May 28, 1901.
DEAR SIR:—Bees arrived in good condition. Transferred them to hive and gave them honey. Have reinforced them with hatching brood. Are working when not too cold. Have right color, and are satisfactory. D. B. GIVLER.

I like your way of packing bees to express. E. K. MEREDITH, Batavia, Ill.

Months July and August.
Number of Queens 1 6 12
GOLDEN QUEENS.
Untested \$.75 \$ 4.00 \$ 7.00
Tested 1.25 6.50 10.00
Select Tested 2.00 9.00 16.00
Breeders 5.00
HONEY QUEENS.
Untested \$.75 \$ 4.00 \$ 7.00
Tested 1.25 6.50 10.00
Select Tested 1.50 7.00 12.00

Safe arrival guaranteed. Descriptive price-list free. D. J. BLOCHER, Pearl City, Ill.

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Retail—Wholesale—Jobbing.

I use a PROCESS that produces EVERY ESSENTIAL necessary to make it the BEST and MOST desirable in all respects. My PROCESS and AUTOMATIC MACHINES are my own inventions, which enable me to SELL FOUNDATION and

Work Wax Into Foundation For Cash at prices that are the lowest. Catalog giving

Full Line of Supplies,

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GUS. DITTMER, Augusta, Wis.
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with 13 or 16 inch wire PAGE Fence, and it is well-fenced for a lifetime. Write for descriptions.

PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.

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QUEENS

Now ready to supply by returned mail. STOCK which can not be EXCELLED!!! Bred under the SUPERSEDED CONDITION of the colony.

GOLDEN ITALIANS, the GREAT HONEY-GATHERERS. They have no SUPERIOR and few equal. 75c each; 6 for \$4.00.

RED CLOVER QUEENS, the LONG-TONGUED ITALIANS, which left all RECORDS behind in GATHERING HONEY, \$1 each; 6 for \$5. SAFE ARRIVAL GUARANTEED.

C. H. W. WEBER, Successor to CHAS. F. MUTH, 2146 & 2148 Central Ave., CINCINNATI, O. Headquarters for Root's Goods at Root's Prices. Catalog free; send for same.

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Prospects for a Large Honey-Flow.

The prospect is good for a large basswood flow, which will be out in about a week. Alsike and white clover are yielding well now. I. A. TRAVIS.

Wood Co., Wis., June 29.

Bees Doing Fairly Well.

Bees are doing fairly well here. I wintered 6 colonies, and have increased to 12. I have prevented all swarming, though they are very strong in bees. They have already stored six supers of honey.

I have three kinds of bees, and the leather-colored Italians are the best.

JAS. H. KNOTTS.

Preston Co., W. Va., June 22.

April Weather Hard on Bees.

I put 42 colonies of bees into winter quarters, and 40 of them came through safely, but one died in April of spring dwindling. April was a very hard month on bees, only 1 1/4 days out of the first 23 being sunshiny. On April 6 last year I moved my 29 colonies of bees from Tyngsboro to this place, and there were not two days in succession that the bees did not go out foraging. This year there were five days in succession that no bees were flying.

JOHN T. COBURN.

Middlesex Co., Mass., June 22.

White Clover Dried Up.

White clover is about dried up, three weeks ahead of its usual time. Basswood is just beginning. I can't tell what it will yield yet, but it looks well.

E. M. JOHNSON.

Dane Co., Wis., July 1.

Finds Bee-Keeping a Pleasure.

I was born in Hillsdale Co., Mich., April 16, 1869, and lived on a farm until about 18 years of age, when I began attending high school in Hillsdale. From that time until 1897 I was in school work, either as student or teacher. In the fall of 1896 I married Miss Mazie E. Harmon, of Mason County.

Because of the confinement of school work, my health began to give way, and we decided to locate on a fruit-farm. So here we are in the midst of the Michigan fruit-belt, with more than 2000 trees to look after. We have daily mail delivery, telephone connections, and are pleasantly located to enjoy life.

During the fall of 1899, while making a small business transaction with one of my neighbors, he proposed to turn three colonies of bees over to me in the deal. I knew nothing about bees, that is, so far as management was concerned, but I have a honey-tooth, and am somewhat curious to learn the habits of plants, insects, etc., so the deal was made. The neighbor agreed to deliver the bees and pack them for winter, and he did as he agreed, but he packed them too tight.

Of course, as soon as I purchased some bees I began reading everything I could find on that subject, getting ready to manage them the next spring. Spring came, and one fine day my neighbor came over to unpack the bees and get me started. As I said before, he had packed them too tight, and all were smothered. The honey was there, but the bees were dead. My neighbor was perplexed and disappointed, and of course I was. But he left me the honey, and gave me another colony in a very poor box-hive, and I began to work with my bees.

During June they swarmed, and I hived the new swarm on the old stand, and soon transferred the old colony to a movable-frame hive. I did not get much surplus last season, but bought another good colony in the fall, and

To make cows pay, use Sharples Cream Separators. Book "Business Dairying" & Cat. 212 free. W. Chester, Pa.

The Queen Establishment

OF
O. P. Hyde & Son, Hutto, Texas,
IS FOR SALE.

This establishment consists of 3 entire apiaries, 500 nuclei, and everything connected with the business. Hyde's superior long-tongued stock of straight Goldens and light home bred 3-banders, have no superiors. Full particulars, prices, cause for selling, etc., made known on application. If interested, write at once.

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DAVENPORT, IOWA, BEE-KEEPERS' SUPPLY HOUSE.

Dadant's Foundation, G. B. Lewis' Hives, Sections, etc., at manufacturers' prices.

LOUIS HANSSEN'S SONS,
213-215 W. 2d St., Davenport, Iowa.
Send for catalog.

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Northern Italian Queens!

Raised from Imported Mothers.

Our stock is so carefully bred and selected, as to secure car-loads of honey. Locality free from foul brood and other bee-diseases. Prices: 1 untested Queen, \$1.00, 6 for \$5.00; 1 tested Queen, \$1.50, 6 for \$7.50; best imported Queens, \$6.00; fair imported, \$5.00.

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RICHLAND CENTER, WIS.

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Standard Belgian Hare Book!



BY M. D. CAPPES.
THIS book of 175 pages presents a clear and concise treatment of the Belgian Hare industry; its growth, origin and kinds; the sanitation and construction of the rabbitry; selection of breeding stock; care of the young, feeding, diseases and their cures, scoring, marketing, shipping, &c. First edition of 50,000 copies was sold in advance of publication.

Price, in handsome paper cover, 25 cents, postage paid; or with the American Bee Journal one year—both for only \$1.00.

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has a hobby which is the sheep-breeder and his industry, first, foremost and all the time. Are you interested? Write to-day.

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to fill orders promptly for Untested Queens reared from a breeder of the HUTCHINSON SUPERIOR STOCK, or a select GOLDEN breeder, and mated to Golden drones, at 75 cents each; \$4.00 for 6, or, \$7.50 per dozen.

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Big Catalog Free. Write now. **Leahy Mfg. Co.**, 2415 Alta Sita, E. St. Louis, Ill.

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Bee-Keepers' Supplies.

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H. G. ACKLIN, Manager.

1024 Miss. Street, St. Paul, Minn.

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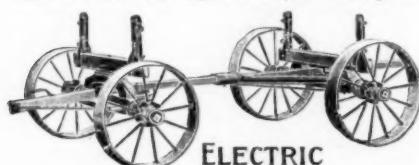
ALBINO QUEENS If you want the most prolific Queens—if you want the gentlest Bees—if you want the best honey-gatherers you ever saw—try my Albino Queens in April, \$1.00; Tested, \$1.50.

11A26 **J. D. GIVENS, LISBON, TEX.**

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Farm Wagon Economy.

The economy of this proposition is not all found in the very reasonable price of the wagon itself, but in the great amount of labor it will save, and its great durability. The Electric Wheel Co., who make this Electric Handy Wagon and the now famous Electric Wheels, have solved the problem of a successful and durable low-down wagon at a reasonable price.



This wagon is composed of the best material throughout—white hickory axles, steel wheels, steel hounds, etc. Guaranteed to carry 4000 lbs. These Electric Steel Wheels are made to fit any wagon, and make practically a new wagon out of the old one. They can be had at any height desired and any width of tire up to 8 inches. With an extra set of these wheels a farmer can interchange them with his regular wheels and have a high or low-down wagon at will.

Write for catalog of the full "Electric Line" to Electric Wheel Co., Box 16, Quincy, Ill.

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packed them all on the summer stands for winter. Two of them came through the winter in good condition, and the other one not so good. Two have swarmed, and all are working well on clover now.

I consider that the knowledge gained and the pleasure derived from the bees pay well for the venture, and I expect to eat some fine honey this year, and continue to study the habits of the little bee. H. D. STOWELL.

Mason Co., Mich., June 24.

Some Kinks in Bee-Keeping.

Tack a piece of fine wire-cloth over the valve on the smoker bellows. This will keep other people from spoiling the spring by sticking their fingers through, as well as to serve to keep bees, etc., from getting in and preventing the valve from closing.

In wiring frames start the tack slanting. Then fasten the first end of the wire to the bottom, and the last one to the top. Driving the tack draws the wire tight. The "A B C" book says, "Do not have it tight," but an experience with over 10,000 frames this season shows that the tighter the wire the more good it does.

Two horizontal wires seem to be enough even with 10 sheets to the pound, except for swarms. Then the weight of the many bees will make almost anything sag on a hot day.

Put the spacing staples on the bottom end of the end-bar instead of the top. By so doing one will avoid smashing bees when lifting the frames out in a hurry. This is the method used by the Coggshalls and other rapid workers. These staples should be used on all frames, whether short top-bar or not. They also keep the end-bars from getting stuck fast at the bottom.

Wear a pair of bicycle pants' guards when at work in the apiary, and thus keep the bees from getting inside of your trousers.

Always give the visiting small boy (and the big ones, too) some honey. When they know that they can get it by going when the owner is there, they will not visit his apiary for it when he is absent. HARRY HOWE.

Cuba, June 18.

Big Clover Crop—Bees Booming.

We have the biggest crop of white clover that I ever saw. Bees are booming, and I am putting on the second supers.

L. HIGBARGER.

Ogle Co., Ill., June 26.

An Old-Time Honey-Flow in Ohio.

The past spring here was a very poor one, and we had to restock some of our nuclei the second time.

We are having an old-time honey-flow for the first time in three years, and we appreciate it very much. The prospect for its continuance is good. H. G. QUIRIN.

Erie Co., Ohio, June 26.

Bees, Bears and Turtles in the Mangrove Swamps.

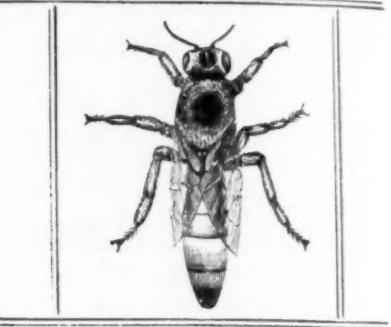
Bees are in fair condition, but the honey season is very late here, and but little honey has been stored yet.

I have moved two apiaries to the mangrove swamps, where we elevated the stands about seven feet above ground, so as to be sure to have them above water in case of a gale. I am now fixing to move 150 more colonies to another mangrove swamp, where there are about 100 acres of solid mangrove trees within a mile of the bees. You can imagine what a job it is to build stands seven feet above the ground for 150 colonies, and have room to work with them. Also to build a barbed-wire fence around them that is bear tight and bull strong.

Bears are quite plentiful here. W. A. Martin and F. C. Prang heard queer noises across the creek from Mr. Prang's home the other day, and upon investigating found two bears and two cubs. They shot the bears, and took the cubs, that would weigh about 25 pounds each. Mr. Martin took the cubs to Ft. Pierce, where he sold them for \$10. He

UNTESTED
Italian Queens Free
BY RETURN MAIL.

For sending us **One New Subscriber** for one year, to the American Bee Journal, with \$1.00, we will send, **by return mail**, a fine Untested Italian Queen free as a premium. This offer



is made only to our present regular subscribers.

We will mail one of the above queens alone for 75 cents; or 3 for \$2.10.

Please do not conflict the above offer with the one on another page which refers to Red Clover Queens. For sending us **two** new subscribers, and \$2.00, we will mail free as a premium an Untested Red Clover Italian Queen.

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That covers the whole Apicultural Field more completely than any other published, send \$1.25 to

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FOR HIS
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Liberal Discounts to the Trade.
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California! If you care to know of its Fruits, Flowers, Climate or Resources, send for a sample copy of California's Favorite Paper—

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\$13.00 to Buffalo and Return \$13.00
via the Nickel Plate Road from Chicago, for the Pan-American Exposition. Tickets on sale daily, good leaving Buffalo up to midnight of the 10th day from and including date of sale. Also tickets on sale daily Chicago to Buffalo and return at \$16.00 for the round trip, with 15-day limit, including date of sale. \$21.00 Chicago to Buffalo and return, good for 30 days.

Tickets Chicago to New York and return at special reduced rates. Write John Y. Calahan, General Agent, 111 Adams St., Chicago, for full particulars and folder showing time of trains, etc.

16 2A3

was on the ocean beach hunting turtle-eggs yesterday, and found a place that was badly mixed up with bear and turtle tracks, which showed a severe struggle had taken place. Following a trail leading back in the bushes for half a mile he found a 200-pound turtle partly eaten. He dressed the turtle and took the meat home, bringing me a generous mess of it. These turtles come out on the ocean beach at this time of the year to lay their eggs, which are about as large as hen's eggs, but not so good. They lay from 100 to 200, and then go back into the ocean again. The turtles sometimes weigh 1000 pounds, but I never saw one that weighed more than 400 or 500 pounds.

I was shot on Feb. 16, and have hardly gotten my usual strength back again. I was intending to commence extracting to-day, but it has rained hard all day. H. T. GIFFORD.

Brevard Co., Fla., June 11.

Amount of Honey Stored in a Day.

My bees came through the winter in rather poor condition, but they are doing well at present. I have two colonies of pure Italians that occupy three 8-frame brood-chambers.

I have been away to school, and did not get home in time to give my bees the attention they should have had. I have been surprised to find how ignorant and afraid most people are of bees when they come in contact with them, but how much they know about them if they never have had anything to do with them!

My father became anxious to know how much honey the bees stored in one day, so he made what he calls a pair of "scales." He measured off one-half of a plank and rested the middle on the edge of a board. On one end he fastened a colony of bees that had been hived only a short time before, and on the other end a rock that would just balance the weight of the hive and bees at dusk. He put on bricks as the hive grew heavier, claiming that as he weighed the bricks he could tell just how much honey was gathered in a day. One evening the scales showed about $8\frac{1}{2}$ pounds gain, but it was 4 pounds lighter in the morning. LESLIE HAZEN.

Nemaha Co., Kans., June 19.



Supersedure and Control of Queens.

Dr. C. C. Miller says in the American Bee-keeper:

It is undoubtedly cheaper to let the bees themselves do the superseding than to replace queens with others, either home-reared or purchased; but the wise bee-keeper will still keep the whole matter under his control by suppressing all poor stock and encouraging the good. From time to time he will seek to improve by introducing fresh stock from the best queen-breeders; but he will not stop at that. He will keep tab on the performance of every colony, and be able to tell you just what the progeny of each of the queens did during the preceding year, or years, of their lives; and knowing this, he will know from which queen he is to rear. This matter of keeping a careful record of the performance of each colony is at the foundation of building up an apiary that is to bring in the best returns. How many bee-keepers do you suppose keep any such record?

If you have never given the matter any attention, perhaps it may be well to recall some facts that you have probably noticed without carefully considering their bearing. You may have noticed that, as a rule, the colonies most given to swarming have not been among the best for storing surplus, and that those which have made the best super records have not wasted much time in swarming. If you have paid no attention to this, but have left the bees to run things their own way, the bees most given to swarming are the ones that have given you increase almost entirely,



BEE-KEEPERS' SUPPLIES

THE FINEST IN THE WORLD.

Our New 1901 Fifty-Two Page Catalog Ready.

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G. B. LEWIS COMPANY, Watertown, Wis., U.S.A.

Branch, G. B. LEWIS Co., 19 S. Alabama St., Indianapolis, Ind. Excellent shipping facilities and very low freight rates for Southern and Eastern territories.

25 cents Cash paid for Beeswax.

low, upon its receipt, or 27 cents in trade. Impure wax not taken at any price.

Address as follows, very plainly,

GEORGE W. YORK & CO., 144 & 146 Erie St., Chicago, Ill.



Tennessee Queens!

Fine lot of Choice Tested Queens reared last season, daughters of select imported and select golden queens, reared 3½ miles apart, and mated to select drones, \$1.50 each; untested warranted Queens, from same breeders, either strain, 75c each. No bees owned nearer than 2½ miles. None impure within 3, and but few within 5 miles. 28 years' experience. Discount on large orders. Contracts with dealers a specialty. JOHN M. DAVIS, 6A26t Spring Hill, Tenn.

Please mention Bee Journal when writing.

Standard Bred Queens.

Acme of Perfection.

Not a Hybrid Among Them.

IMPROVED STRAIN GOLDEN ITALIANS.

World-wide reputation. 75 cts. each; 6 for \$4.00.

Long-Tongued 3-Banded Italians

bred from stock whose tongues measured 25-100 inch. These are the red clover hustlers of America.

\$1.00 each, or 6 for \$5.00. Safe arrival guaranteed.

FRED W. MUTH & CO.

Headquarters for Bee-Keepers' Supplies,

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Catalog on application. CINCINNATI, O.

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Marshfield Manufacturing Company.

Our Specialty is making **SECTIONS**, and they are the best in the market. Wisconsin BASSWOOD is the right kind for them. We have a full line of **BEE-SUPPLIES**. Write for free illustrated catalog and price-list.

8A26t

Marshfield Manufacturing Co., Marshfield, Wis.



Red Clover Queens

LONG-TONGUED BEES ARE DEMANDED NOW.

ONE Untested Italian Queen FREE as a Premium for sending us TWO new subscribers to the American Bee Journal for one year (with \$2); or, one Tested Queen free as a premium for sending us FOUR new subscribers with \$4.00.

We have arranged with one of the oldest and best queen-breeders (having many years' experience) to rear queens for us the coming season. His bees average quite a good deal the longest tongues of any yet measured. The Breeder he will use is direct from Italy, having imported her himself. Her worker-bees are large, somewhat leather-colored, very gentle, and scarcely requiring veil or smoke. They stored red clover honey last season.

All queens guaranteed to arrive in good condition, and all will be clipped, unless otherwise ordered.

CASH PRICES of these fine queens will be as follows: Untested, \$1.00 each; Tested, \$2.00 each. Send all orders to

GEORGE W. YORK & CO.

144 & 146 Erie St., CHICAGO, ILL.

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while your best colonies have given no increase. Don't you see that such a course, continued indefinitely, will inevitably result in run-out bees? By keeping matters under your own control, you can make the current run the other way.

Introducing Queens With Tobacco-Smoke.

Here are instructions that I am sending out this year for introducing queens, and guaranteeing the safe introduction. After giving notice of the date when the queen will be sent, I say:

As soon as you receive this notice, remove the queen from the colony to which you expect to introduce the new queen. When she arrives, put her away in a safe place until after sundown, just at dusk, then light your smoker, and when it is well to going put in a pipeful of smoking-tobacco, put on the cover, puff until you get an odor of tobacco, then puff one or two good puffs into the entrance of the hive. Wait two or three minutes, then send in another good puff, remove the cover, drive the bees down with puff of smoke, open the cage and allow the queen to run down between the combs, following her with a puff of smoke, and put on the cover. Half an hour later, light up the smoker again, putting in the tobacco as before, and blow two more good puffs in at the entrance. If no honey is coming in, feed the colony a pint of syrup each night from the inside of the hive, but don't disturb the brood-nest for four or five days.—Bee-Keepers' Review.

Weight of Wax-Scales.

E. F. Robinson gives this interesting bit of information in the Canadian Bee Journal:

While making a display of the natural history of the bee a few weeks ago, I took the trouble to sort out a lot of wax-scales from some fine refuse, and arranged these, the natural scales, into the word WAX, but before doing so I weighed a number on a pair of jeweler's diamond scales to find out how many went to the pound, for I could not find any reference to this in any of the many books on the bee. I find there are just 192 to the grain, and of course 1,474,560 to the pound.

Inversion of Brood-Combs.

This has been found profitable by Mr. L. L. Eisenhower, of Pennsylvania. In the fall he takes away all combs not covered by the bees, taking good care of them, and in the spring he returns them, *upside down*. He uses an invertible frame of his own make, and slightly opens the cappings of the combs when he returns them to the hive. He believes that he has prevented many cases of spring dwindling by this practice. He admits that inversion has been cast off long ago, but, very wisely, says that we sometimes cast away something that we *think* we have tried, whereas, we have scarcely made its acquaintance.—Bee-Keepers' Review.

Co-operation Among Bee-Keepers.

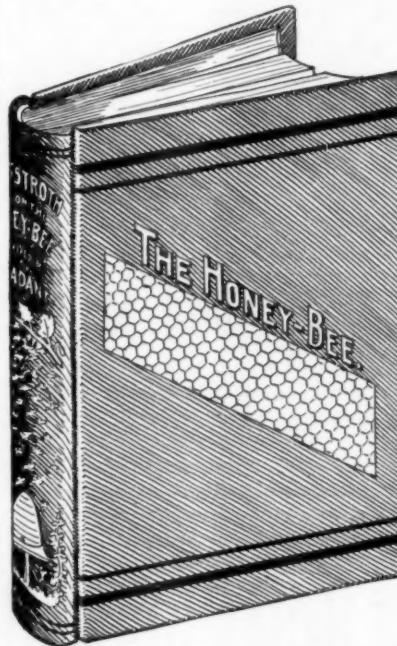
The June number of the Rocky Mountain Bee Journal is almost entirely taken up with the matter of co-operation among bee-keepers. Those Coloradoans are not merely theorizing on the matter, but have been putting in practice some excellent co-operative work, somewhat to the advantage of their pockets. It seems that they have so enlarged the work that they now have, under the title of "The Colorado Honey-Producers' Association," an office kept open the year round in Denver, with Frank Rauchfuss as its energetic manager. The following interview with Mr. Rauchfuss is given in the paper mentioned:

"1. What advantage, if any, accrues to stockholders in the Colorado Honey-Producers' Association, besides dividends on their

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stock, in the purchase of supplies through that Association?"

"You should emphasize the fact that the Association was formed to enable its members to market their honey profitably. We kept up the price of honey last year very successfully. We handled a large share of the honey crop. Our members got the best prices for their honey; and at the close of the season we were able to return them 95 percent of the usual commission. Handling only honey we could not afford to keep a store open the whole year. By expanding our business we are able to keep the store open all the year; to keep in closer touch with the bee-keepers and the trade, and to handle the business more successfully, because more intelligently. You know that supplies are cheaper than last year. We claim part of the credit for that. The State Association deserves part of the credit, perhaps the larger part. Any one who will compare the price-list of last year and this year can figure out the advantages for himself."

"2. Has the handling of supplies by the Association tended to cheapen the price of supplies in the city of Denver?"

"Compare the lists," said Mr. Rauchfuss. I compared. Eight items from last year's price-list footed up \$9.42; the same eight items from the price-list for this year amount to \$8.34. These are staple articles. The difference amounts to a trifle less than 13 percent of present prices—a saving worth considering.

"3. Would you favor the establishment of branch associations for the handling of supplies, subsidiary to the main association in the smaller cities throughout the State?"

Mr. Rauchfuss answered with an emphatic "Yes!" and then walked away to wait on an impatient customer.

Horehound Honey.

H. H. Hyde says in the Southland Queen that horehound is in his locality in Texas, "and sometimes it ruins a good deal of honey in the fall, but in the spring it fortunately blooms early enough so that all the honey is consumed in brood-rearing."

Fastening Foundation.

C. Davenport fastens foundation in brood-frames or sections by means of something like a large medicine-dropper or pipette. He says in Gleanings in Bee-Culture:

Mine is made of a tin tube about 4 inches long, and not quite $\frac{1}{2}$ inch in diameter. The lower end of this tube is gradually tapered down to a point, so the hole at the extreme end is a little less in size than what it would be on an ordinary lead-pencil if the lead were removed to the upper part of the tube. A rubber nipple or bulb is attached, and it is important to have this rubber fit over the tube tight enough to exclude air. When the lower end is placed in melted wax, or any other liquid, with the rubber bulb compressed between the thumb and finger, as soon as it is allowed to expand by air suction, it draws some of the liquid up into the tube. By allowing the rubber to remain expanded the tube will not leak when withdrawn, no matter what position it is held in. Pressure on the rubber forces the liquid out slow or fast, just as desired.

Does a Queen Carry Foul Brood?

The editor of the Australasian Bee-keeper says:

My opinion on the matter is so decided that should I need a queen from a foul-brood apiary I would introduce her into a healthy colony of bees without the slightest hesitation or fear of communicating the disease. I would, however, deal very deliberately with any bees accompanying the queen. Every one would be crushed and afterwards burnt. In my opinion, it is the bees only that communicate the disease, and not the queen. To back up my assertion, I may say I know of numerous queens from foul-brood colonies having been introduced to healthy bees, and

have yet to find the queen blamed for communicating the disease. When I get a queen from elsewhere, or an imported queen, I open the cage before a closed window, and after the queen is caged I destroy every bee. Most of them are readily crushed when flying against the window glass.

Extracting-Supers Over Winter.

In the Southland Queen, Louis Scholl tells that he practiced putting enamel cloth over his brood-frames and piling the extracting-supers above for winter. He says further:

But this had to be removed in the spring, so last year I tried some of the heavy brown paper used by butchers, and putting a sheet on top of the brood-frames, by just tilting back the supers and all above. If honey is in the top supers, a hole can be torn in the sheet of paper to let the bees go for it above.

I would prefer to have the sheet of paper a little narrower than the hive is wide inside, leaving a passageway next to the walls.

In spring, as soon as the colony gets more populous, and more room is needed, the bees will attend to the paper, gnawing it away, and saving the apiarist the labor of removing it.

The Emerson Binder

This Emerson stiff-board Binder with cloth back for the American Bee Journal we mail for but 60 cents; or we will send it with the Bee Journal for one year—both for only \$1.40. It is a fine thing to preserve the copies of the Journal as fast as they are received. If you have this "Emerson" no further binding is necessary.

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Bee-Keepers' Guide, or Manual of the Apizyry, by Prof. A. J. Cook, of the Michigan Agricultural College.—This book is not only instructive and helpful as a guide in bee-keeping, but is interesting and thoroughly practical and scientific. It contains a full delineation of the anatomy and physiology of bees. 460 pages, bound in cloth and fully illustrated. Price, \$1.25.

Scientific Queen-Rearing, as Practically Applied, by G. M. Doolittle.—A method by which the very best of queen-bees are reared in perfect accord with Nature's way. Bound in cloth and illustrated. Price, \$1.00.

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Advanced Bee-Culture, Its Methods and Management, by W. Z. Hutchinson.—The author of this work is a practical and entertaining writer. You should read his book; 90 pages, bound in paper, and illustrated. Price, 50 cents.

Rational Bee-Keeping, by Dr. John Dzierzon.—This is a translation of his latest German book on bee-culture. It has 350 pages, bound in paper covers, \$1.00.

Blenen-Kultur, by Thos. G. Newman.—This is a German translation of the principal portion of the book called "Bees and Honey." 100-page pamphlet. Price, 25 cents.

Blenenzucht und Honiggewinnung, nach der neuesten methode (German) by J. F. Eggers.—This book gives the latest and most approved methods of bee-keeping in an easy, comprehensive style, with illustrations to suit the subject. 50 pages, board cover. Price, 50 cents.

Bee-Keeping for Beginners, by Dr. J. P. H. Brown, of Georgia.—A practical and condensed treatise on the honey-bee, giving the best modes of management in order to secure the most profit. 110 pages, bound in paper.

Bee-Keeping for Profit, by Dr. G. L. Tinker.—Revised and enlarged. It details the author's "new system, or how to get the largest yields of comb or extracted honey." 80 pages, illustrated. Price, 25 cents.

Apinary Register, by Thomas G. Newman.—Devotes two pages to a colony. Leather binding. Price, for 50 colonies, \$1.00; for 100 colonies, \$1.25.

Dr. Howard's Book on Foul Brood.—Gives the McEvoy Treatment and reviews the experiments of others. Price, 25 cents.

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HONEY AND BEESWAX

MARKET QUOTATIONS.

CHICAGO, June 19.—New comb honey has not yet reached this market. It would sell at 15@16c if choice white, and the ambers at 12@13c. The market is entirely bare with exception of a few cases of a lot that we had held for us, expecting it would be needed. Advices are that shipments will be started by July 1. Very little trading is being done in extracted, as large dealers will not contract this season unless at low figures; some sales of amber have been made at 4@5c for early autumn delivery; white is held at 5c. Beeswax sells at 30c. **R. A. BURNETT & CO.**

CINCINNATI, May 17.—No demand for comb honey, also stock of it well exhausted. Extracted very dull; sales are more or less forced; lower prices from 1/2 to 1 cent per pound. **C. H. W. WEBER.**

BOSTON, June 29.—There is practically no comb honey in our market, and owing to warm weather very little call for it. Are expecting some new comb early next month. Market for extracted dull, at 6@7c. **BLAKE, SCOTT & LEE.**

OMAHA, May 1.—Comb honey, extra white, 24-frame cases, per case, \$3.40; No. 1, \$3.25; amber, \$3.00. **PEYCKE BROS.**

NEW YORK, June 1.—Extracted honey is exceedingly dull and very little moving. We quote for the present: White, 6@7c; light amber, 5@6c; amber, 5@5c. Some demand for comb honey at unchanged prices. New crop is now beginning to arrive from the South, and sells at from 12@15c, according to quality and style. Beeswax, 29c. **HILDRETH & SEGELEN.**

ALBANY, N. Y., June 18.—Honey market is dull with no receipts or stocks and little demand. It is between seasons now. Prospect of good crop in this vicinity from what bees there are left, the greater portion having been killed by foul brood exterminators. **H. R. WRIGHT.**

DETROIT, June 27.—Very little old honey in market, and no new honey come in yet. Splendid showing for a good yield of white clover honey. Beeswax, 26@27c; demand light. **M. H. HUNT & SON.**

BUFFALO, June 26.—Honey not wanted till cool, fall weather. Little old honey here and dragging, 6@10c. Extracted not wanted. Fruit takes place of honey now. **BATTERSON & CO.**

KANSAS CITY, June 14.—Very little old honey on our market but what is damaged by being granulated. Sales are light at 15 cents for best grade No. 1 Colorado. Amber, 13c. Beeswax firm at 25@30c. **W. R. CROMWELL PRODUCE CO., Successors to C. C. Clemons & Co.**

SAN FRANCISCO, June 5.—White comb, 11@12c cents; amber, 9@10c; dark, 6@8 cents. Extracted, white, 5@6c; light amber, 4@4c; beeswax, 3@4c. **Beeswax, 26@28c.**

Dealers are very bearish in their ideas, but are not securing much honey at the prices they name. In a small way to special trade an advance on quotations is being realized.

Wanted Fancy White Comb Honey in no-drip cases; also Extracted Honey. State price, delivered. We pay spot cash. **FRED W. MUTH & CO., Front & Walnut Sts., Cincinnati, Ohio.** Reference—German National Bank, Cincinnati. 28A17t Please mention the Bee Journal.

BEES We will pay 26c cash, per lb. for pure, bright yellow beeswax, and 20c cash, per lb. for pure, dark beeswax delivered here. **CHAMBERLAIN MEDICINE CO., Des Moines, Iowa.** 27A13t Please mention the Bee Journal.

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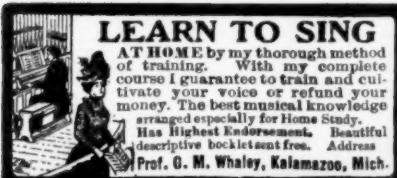
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Alalfa Clover80c	1.40	3.25	6.00
Japanese Buckwheat50c	1.00	1.60	

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A Bee-keeper's Paradise.

En route to El Paso.—I have just come from a county about 40 miles square that has more bee-keepers to the square mile than any other locality of its size I ever visited. The inhabitants talk bees at the hotels, on the streets, and everywhere, just as farmers talk crops and business in the North. This county produces more honey than any equal area, I believe, in the United States. Some say that its yearly output is a whole trainload of honey; but many aver that this is too low, and that two whole trainloads would come nearer the truth. Of course this great amount doesn't go all in one lot, but in large and small shipments.

The average per colony is high, and there is a honey crop every season. It is estimated that in this one county, outside of the towns, nearly one-half the population are bee-keepers.

The great bulk of the honey is of the very finest, and some of it is literally water-white. There are thousands and thousands of acres of honey-plants on cheap land; and bees—there are not enough to gather it all.

The bees commence swarming early in the spring; and, when the main honey-flows commence, actually stop swarming, destroy cells, kill off the drones, and commence business. Did you ever hear the like of it before? You say, "No, and no one else." Well, I think I can prove every statement; but for the present I am not at liberty to give the place or other details; but very shortly I'll tell the whole story, with some fine pictures.

This is only one of the good things in store for readers of Gleanings in Bee-Culture. Send 15 cents for three months' trial or 25 cents for six months' trial, or \$1.00 for one year and one untested Italian Queen. Send \$2.00 and we will send Gleanings one year and one of our Red Clover Queens. Speak quick if you want one.

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